2/19/88 A3100-2

February 15, 1988, Volume 192, Number 4

JOURNAL

OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION

90015262 1 021588 2 22
EDITORIAL INFO SERV
CHRONICLE STAT REF INDEX
4520 EAST WEST HWY
WASHINGTON DC 20014

1987 AVMA Activities Summary 457

The *Human* Side of Veterinary Medicine
Self-delusion/self-defeat 490

Special Commentary
Danger lurks in your supermarket meat cases ... 494

Special Report
Survey of expectations among clients
of three small animal clinics 498

Economic Note
Livestock producers' attitudes about
food animal veterinarians 543

JOURNAL
OF THE AMERICAN VETERINARY MEDICAL ASSOCIATION

©American Veterinary Medical Association, 1988
All Rights Reserved

Vol 192 February 15, 1988 No. 4
JAVMA 192(4) 449-576 (1988)
ISSN 0003-1488

Letters

Appreciates personal service on insurance claim 453
Pet food labeling 453
Comments on tardive dyskinesia 454

1987 AVMA Activities Summary 457

The *Human* Side of Veterinary Medicine

Self-delusion/self-defeat—*Jacob Antelyes* 490

Special Commentary

Danger lurks in your supermarket meat cases—*Edward L. Menning* 494

Special Report

Survey of expectations among clients of three small animal clinics—*Deena B. Case* 498

Interpretive Summaries of Articles in This Issue 504

Reports of Original Studies

Use of cisplatin for treatment of appendicular osteosarcoma in dogs—*Wayne Shapiro, Theresa W. Fossum, Barbara E. Kitchell, C. Guillermo Couto, and Gordon H. Theilen* 507

Genetic-associated resistance to foot rot in selected Targhee sheep—*Marie S. Bulgin, Stuart D. Lincoln, Charles F. Parker, Peter J. South, Jerome J. Dahmen, and V. Michael Lane* 512

Clinical Reports

Electrocardiographic evaluation of arrhythmias in six cattle—*M. S. Claxton* 516

Incomplete linear tibial fractures in two horses—*Philip J. Johnson, Rodger V. Allhands, Gordon J. Baker, Michael J. Boero, Jonathan H. Foreman, Thor Hyyppa, and John C. Huhn* 522

Bilateral seminal vesiculitis and ampullitis in a stallion—*T. L. Blanchard, D. D. Varner, J. P. Hurtgen, C. C. Love, M. R. Cummings, P. J. Strezmienski, C. Benson, and R. M. Kenney* 525

Septicemic salmonellosis and suspected phenylbutazone toxicosis in an aged pony—*Mary K. Hondalus and Jeanne Lofstedt* 527

Management of pleural effusion secondary to metastatic adenocarcinoma in a dog—*Wayne Shapiro and Jane Turrel* 530

Use of ultrasonography to diagnose Sertoli cell neoplasia and cryptorchidism in a dog—*B. E. Eilts, R. D. Pechman, C. S. Hedlund, and J. M. Kreeger* 533

Reports of Retrospective Studies

Heterotopic polyodontia in horses: Nine cases (1969–1986)—*John F. Fessler* 535

Use of methyl methacrylate orbital prostheses in dogs and cats: 78 cases (1980–1986)—*Mark P. Nasisse, Rene T. van Ee, Robert J. Munger, and Michael G. Davidson* 539

Economic Note

Livestock producers' attitudes about food animal veterinarians—*J. Karl Wise* 543

What Is Your Diagnosis?

Mary Hondalus, Chris Lamb, and Jeanne Lofstedt 545

Abstracts of Selected Reports

Effect of transport on feeder calves 521
Dysfunction of sense of smell caused by canine parainfluenza virus infection in dogs 529
Humoral immune response of the bovine fetus to in utero vaccination with attenuated bovine coronavirus 538

Announcements

Coming Meetings 547
Foreign Meetings 552
Applications for Membership 553
Educational Opportunities 554

Classified Ads 558

Correction

High-rise syndrome in cats—*Wayne O. Whitney and Cheryl J. Mehlhaff* 542

PUBLICATIONS DIVISION STAFF

Dr. Albert J. Koltveit, *Editor-in-Chief*
Dr. Ann Schola Clark, *Associate Editor*
Dr. Janis H. Audin, *Assistant Editor*
Dr. Nancy W. Leveque, *Assistant Editor*
Dr. Kathleen J. Kovacs, *Assistant Editor*
Bernadine Gordon, *Production Manager*
Kris Piepenburg, *Assistant Production Manager*
Susan Kahler, *News Editor*
Terri Gallatin, *Assistant News Editor*
Charles Hamilton, *Advertising Representative*
Irene Jansons, *Advertising Production Manager*
Jill Cord, *Editorial Assistant*
Elisabeth Crist, *Editorial Assistant*
Jeri Miller Dale, *Editorial Assistant*
Geraldine Ernst, *Editorial Assistant*
Opal Fergerson, *Advertising Assistant*
Janice Johnson, *Editorial Assistant*
Rhonda Jones, *Editorial Assistant*
Helen Moscicke, *Editorial Assistant*
Denise Piatt, *Editorial Assistant*
Leslie Quinlan, *Editorial Assistant*
Nancy Stein, *Advertising Assistant*

AVMA OFFICERS

Dr. Richard B. Fink, 12116 E Washington Blvd, Whittier, CA 90606, *President*

Dr. Walter L. Martin, Jr., 2223 E 23rd St, Chattanooga, TN 37407, *President-Elect*

Dr. Jesse D. Derrick, 226 Engram St, PO Box 146, Montezuma, GA 31063, *Vice President*

Dr. Owen R. Stevens, Jr., 99 Portland St, South Berwick, ME 03908, *Treasurer*

Dr. Arnold Hentschl, 8445 Sand Beach Rd, Harbor Beach, MI 48441, *Chairman of the Executive Board*

Dr. Arthur Freeman, *Executive Vice President*

Dr. Bruce W. Little, *Assistant Executive Vice President*

AVMA SCHAUMBURG OFFICE

American Veterinary Medical Association, 930 N Meacham Rd, Schaumburg, IL 60196. Office hours: 8:30 am to 4:45 pm, Monday through Friday. Telephone toll free: 1-800-248-AVMA (In Illinois: 1-800-233-AVMA). Outside the continental United States call 312-885-8070.

AVMA GOVERNMENTAL RELATIONS DIVISION

Dr. Lonnie J. King, 1522 K Street, NW, Suite 828, Washington, DC 20005. Telephone: 202-659-2040.

AVMA INSURANCE INFORMATION

To obtain information on the AVMA Group Health and Life Insurance Trust or the AVMA Professional Liability Insurance Trust, call toll free: 1-800-621-6360.

SUBSCRIPTIONS: For one year: members $35; others $70 in the United States and possessions; $90 in foreign countries. Single copies: $6.00 in the United States and possessions; $8.00 in foreign countries.

Published semimonthly at 930 N Meacham Rd, Schaumburg, IL 60196, by the American Veterinary Medical Association. Second class postage paid at Schaumburg, Ill, and at additional mailing offices. Contents copyright 1988 by the AVMA.

ADDRESS CHANGE: Send new address (and moving date) 45 days ahead. Include old address as it appeared on previous issues (if possible send label).

POSTMASTER: Send address changes to JAVMA, 930 N Meacham Rd, Schaumburg, IL 60196.

VBPA

1987 AVMA Activities Summary

Membership

AVMA's membership increased by 4.5% to 45,622 members at the end of 1987. The 2,676 new members include 2,203 new graduates. Of the 2,216 graduates of US veterinary colleges during 1987, 2,203 (99.9%) joined the AVMA. All of the graduates from 20 veterinary colleges joined the Association. The Association lost 836 members during the year, as follows: death (170), resignation (67), and nonpayment of dues (599). As shown in the table below left, 77.3% of the US members are in private practice; 7.6% are active in academic disciplines and clinical specialties; 7.9% are involved in public health, regulatory, military, and other activities; 4.6% are retired; and 2.6% (mostly new graduates) are in unknown activities.

AVMA Membership According to Professional Activity—Dec 31, 1987

Bovine practice (exclusive)	419
Equine practice (exclusive)	1,908
Porcine practice (exclusive)	56
Large animal practice (all species)	1,457
Mixed practice (predominantly large animal)	4,590
Mixed practice (50-50 large and small)	3,318
Mixed practice (predominantly small animal)	4,964
Small animal practice (exclusive)	18,388
Poultry practice (exclusive)	79
Feline practice (exclusive)	64
	35,243
Anatomy	96
Biochemistry	11
Microbiology	275
Parasitology	71
Pathology	876
Pharmacology	74
Physiology	114
Radiology	125
Toxicology	146
Surgery	312
Pathology, Avian	97
Pathology, Clinical	118
Ophthalmology	109
Nutrition	54
Clinician	376
Theriogenology	137
Anesthesiology	73
Internal Medicine	121
Cardiology	18
Dermatology	36
Neurology	25
Epidemiology	52
Oncology	25
Aquatic	27
Avian medicine	91
Ethology	5
	3,464
Veterinary public health	196
Veterinary preventive medicine	55
Teaching and research	396
Regulatory veterinary medicine	667
Administrative	154
Laboratory animal medicine	560
Wildlife, zoo and fur-bearing animals	187
Extension veterinary medicine	61
Diagnostic veterinary medicine	169
Industrial veterinary medicine	295
Military veterinary service	401
Animal technician educator	60
Other veterinary medicine	425
	3,626
Retired	2,105
Unknown professional activity	1,184
Total membership	45,622

Public Information

Media relations

The AVMA prepared and distributed numerous news releases detailing a variety of animal, public health, and Association issues in 1987. Twenty-five separate news releases on food animal topics were distributed to over 5,000 agricultural writers, editors, and broadcasters. The news releases were read by over 5 million people.

In addition to news releases, the AVMA provided editorial assistance to the 3 network television stations, the Public Broadcasting System, radio programs, newspapers, and magazines. Contacts included: United Press International, Associated Press, *New York Times*, *Washington Post*, *USA Today*, *Woman's Day*, *Country Living*, *Ladies Home Journal*, *Glamour Magazine*, *The Chicago Tribune*, *Los Angeles Times*, *DVM Magazine*, *Veterinary Economics*, *Dog World*, and *Success Magazine*.

Media Guide to Veterinary Sources and Information contains the names of 361 contact people for veterinary associations, specialty boards, federal agencies, and colleges of veterinary medicine. Over 5,000 copies were distributed to newspapers, television stations, networks, wire services, magazines, writers, editors, and syndicates.

Animal Health News and Feature Tips was distributed quarterly to over 5,000 media outlets. Almost 200 news and feature tips included stories about research programs at veterinary schools, information on veterinary meetings, AVMA activities, seasonal health tips, and other animal health news items that would be

1987–1988 AVMA officers are (l to r) Drs. Owen Stevens, Jr, treasurer; Walter Martin, Jr, president-elect; Richard Fink, president; Jesse Derrick, vice president, and Arnold Hentschl, Executive Board chairman.

Dr. Steve Arnoczky, a diplomate of the American College of Veterinary Surgeons, was the recipient of one of the biggest research awards in the field of orthopedics. He was awarded the Kappa Delta Young Investigators Award from the American Academy of Orthopedic Surgeons, for his significant contribution to orthopedic research. Dr. Arnoczky is the first veterinarian to win the annual award and was one of four individuals to be chosen by the academy to receive the award.

Swine Practitioners, and the American Association of Sheep and Goat Practitioners.

Speakers were Drs. Jack Morse, private practitioner, Turlock, Calif; Dan Upson, Kansas State University; James Reid, private practitioner, Vienna Va; Thomas Powers, The Ohio State University; William Jenkins, Texas A&M University; C. M. Stowe, Jr., University of Minnesota; Dwight Mercer, Mississippi State University; and R. E. Engel, USDA Food Safety and Inspection Service.

Proceedings of the symposium were published in the January 15, 1988 issue of JAVMA.

Electroimmobilization Devices

Advised that the use of electrical immobilization appears to have noxious effects on animals, the Council on Biologic and Therapeutic Agents recommended against the use of such devices for major procedures. Electrical currents have been known to induce analgesia. However, conventional anesthetic techniques using drugs were found to be more consistent and to provide better muscle relaxation.

Veterinary Specialty Organizations

As of Jan 1, 1988 annual reports from the 14 recognized specialty organizations indicate that there were 3205 certified veterinary specialists in the United States, representing nearly 7% of the total AVMA membership. A total of 243 new diplomates were added during 1987.

A total of 13 specialty organizations are fully recognized by the AVMA House of Delegates, while the American College of Zoological Medicine continues to be provisionally recognized.

At its April 1987 meeting, the Advisory Board on Veterinary Specialties (ABVS) recommended provisional recognition to the specialty of veterinary medical oncology as an affiliate specialty organization under the umbrella of the American College of Veterinary Internal Medicine. This action will become effective when the 1988 AVMA House of Delegates acts on the recommendation.

The American College of Veterinary Nutrition (ACVN) also presented a petition for provisional recognition. Following submission of additional information, the petition was granted and the recognition of the new specialty will also be considered by the 1988 AVMA House of Delegates at its July 1988 meeting.

The list of currently recognized veterinary specialty organizations and their active membership follows:

American Board of Veterinary Practitioners	205
American Board of Veterinary Toxicology	61
American College of Laboratory Animal Medicine	347
American College of Theriogenologists	193
American College of Veterinary Anesthesiologists	64
American College of Veterinary Dermatologists	43
American College of Veterinary Internal Medicine	386
Specialty of Cardiology	47
Specialty of Neurology	40
Specialty of Internal Medicine	332
American College of Veterinary Microbiologists	158
American College of Veterinary Ophthalmologists	104
American College of Veterinary Pathologists	830
American College of Veterinary Preventive Medicine	346
*Specialty of Epidemiology	10
American College of Veterinary Radiology	120
American College of Veterinary Surgeons	327
American College of Zoological Medicine	21
†Total	3,205

*All are also members of ACVP †Some members belong to 2 specialties

Continuing Education

Thirty-three years of committed action and leadership by the AVMA Continuing Education Advisory Committee (CEAC) culminated in the presentation of the 9th Forum on Veterinary Continuing Education (VCE) at the 1987 AVMA convention. The forum highlighted new developments in veterinary medical continuing education, including presentations on alternate therapies, career change, and marketing. Culmination of the forum was the presentation of the Veterinary Continuing Educator of The Year Award to Dr. William F. Jackson,

Economic Note

Livestock producers' attitudes about food animal veterinarians

In 1986, in conjunction with the American Veterinary Medical Association study on the US market for food animal veterinary medical services, a national survey of livestock producers was conducted.[1,2] Analysis of the survey was based on 2,044 usable questionnaires, including 894 primarily beef producers, 417 dairy producers, 338 hog producers, and 395 sheep producers.

In order to determine how producers perceived the importance of a local veterinarian to their farm or ranch operation, producers were asked about 2 sets of statements. The first set of statements focused on 8 services provided by local veterinarians. Respondents indicated whether the service was very important, somewhat important, or not important to their livestock operation.

In general, producers reported that the local veterinarian was very important or somewhat important to their livestock operation. An analysis of each service, however, revealed that there was variation in the importance placed on particular services provided by veterinarians (Table 1).

Approximately 80% of the beef producers, 90% of the dairy producers, and 77% of the hog producers indicated that the local veterinarian was very important for diagnosis and treatment of sick or injured animals. Only 65% of sheep producers believed that the local veterinarian was very important for diagnosis and treatment.

Regarding purchases of animal vaccines and medications/antibiotics, local veterinarians were considered to be very important by 5 of 10 beef producers, 6 of 10 dairy producers, at least 4 of 10 hog producers, and at least 3 of 10 sheep producers.

Herd health management advice and information on reproductive problems were considered very important services provided by local veterinarians by nearly 5 of 10 beef and hog producers, nearly 7 of 10 dairy producers, but only 3 of 10 sheep producers.

Regarding information on feed and nutrition, fewer than 1 in 8 of all producers reported that the local veterinarian was very important to their operation. More specifically, nearly 1 of 3 beef and hog producers, 1 of 4 dairy producers, and 1 of 2 sheep producers reported that the local veterinarian was not important to their operation.

The second set of statements involved a series of statements for which respondents were asked to indicate whether they agreed strongly, agreed, disagreed, or disagreed strongly. For this analysis, agree strongly and agree were collapsed to simply "agree"; disagree and disagree strongly were collapsed to "disagree" (Table 2).

Table 1—Producers' importance of local veterinarian to the livestock operation*

	Beef			Dairy			Hog			Sheep		
	V	S	N	V	S	N	V	S	N	V	S	N
Diagnosis of sick or injured animals	80	18	2	90	9	1	77	19	4	63	31	6
Required regulatory testing	53	30	17	55	33	11	44	33	23	46	27	27
Information on feed and nutrition	14	54	32	17	60	23	12	55	33	10	41	49
Purchases of animal vaccines	51	37	13	63	26	11	49	37	14	34	44	21
Purchases of medications/antibiotics	53	36	11	55	35	10	44	40	16	36	42	22
Treatment of sick or injured animals	80	17	3	89	10	1	76	20	4	65	30	6
Herd health management advice	45	41	14	65	30	5	49	37	14	32	47	21
Information on reproductive problems	48	36	16	72	24	4	46	40	14	32	45	23

*V = percentage indicated very important; S = percentage indicated somewhat important; N = percentage indicated not important.

Prepared by J. Karl Wise, PhD, Wisemark Associates, PO Box 681189, Schaumburg, IL 60168-1189.

Table 2—Livestock producers' attitudes regarding veterinarians

	Beef		Dairy		Hog		Sheep	
	Agree (%)	Disagree (%)	Agree (%)	Disagree (%)	Agree (%)	Disagree (%)	Agree (%)	Disagree (%)
Local veterinarians know a lot about agribusiness and farm economics	62	38	70	30	65	34	40	61
Veterinarians I have used are good at explaining what they know to me	93	7	93	7	92	8	88	12
Veterinarians I have used are good at listening to me about my operation	89	11	92	8	92	8	86	14
I think of the local veterinarian as a herd management consultant	58	42	75	25	64	36	46	54
Local veterinarians' services are beneficial to me	97	3	98	2	95	4	93	7
I usually call the veterinarian only as a last resort	35	65	20	80	33	67	36	64

Table 3—Producers' overall level of satisfaction with local veterinarian

	Very satisfied (%)	Somewhat satisfied (%)	Somewhat dissatisfied (%)	Very dissatisfied (%)	Average rating*
Beef producers	68	28	?	1	3.6
Dairy producers	70	27	3	...	3.7
Hog producers	57	39	3	1	3.5
Sheep producers	53	38	7	2	3.4

*4 = very satisfied; 1 = very dissatisfied.

Approximately 60 to 70% of beef, dairy, and hog producers agreed with the statement that local veterinarians know a lot about agribusiness and farm economics. On the other hand, at least 3 of 10 beef, dairy, and hog producers, and 6 of 10 sheep producers disagreed with the statement.

The second and third statements in Table 2 are positive statements about food animal veterinarians' communications skills of explaining and listening. Most producers, roughly 90%, agreed that local veterinarians were good at explaining what they know to them and were good at listening to them about their operation.

The fourth and fifth statements in Table 2 are positive statements about the value of veterinarians' services to the livestock producer. More than 9 of 10 producers agreed that the local veterinarian's services were beneficial to them. Moreover, roughly 6 of 10 beef and hog producers think of the local veterinarian as a herd management consultant. Not quite 5 of 10 sheep producers felt this way, but as many as 3 of 4 dairy operators did agree that the local veterinarian was a herd management consultant.

Regarding the last statement, "I usually call the veterinarian only as a last resort," approximately 1 of 3 beef, hog, and sheep farm and ranch operators agreed; only 1 of 5 dairy farm operators agreed.

In conclusion, the majority of producers had positive attitudes about local veterinarians, their abilities in diagnosis and treatment, and their communication skills regarding listening to producers' problems and explaining what they know.

Producers indicated that veterinarians were only somewhat important for purchases of antibiotics and vaccines, for herd health management, and for reproductive advice. Veterinarians were not considered important for information on feed and nutrition. While most producers had positive attitudes toward veterinarians, roughly 1 of 5 dairy producers and 1 of 3 other livestock producers would call the veterinarian only as a last resort.

Table 3 summarizes producers' responses to a general question, "Considering everything, how satisfied or dissatisfied are you with the veterinarian you use?" Dairy producers showed the highest level of satisfaction, followed by beef producers, hog producers, and last, sheep producers.

On the survey, producers also were invited to comment on what they thought were their local veterinarian's strongest and weakest points. Hundreds of written comments were submitted by producers. All comments regarding strengths and weaknesses were categorized as dealing with veterinarians' professional characteristics, with veterinarians' services, or with veterinarians' personal characteristics.

Approximately half of the respondents wrote about veterinarians' professional strengths, commenting most frequently on the veterinarian making good diagnoses and treatments, being smart, knowledgeable, and experienced. Most frequently mentioned strengths associated with professional services were promptness and availability. Approximately 25% of the producers commented on the veterinarian's personal characteristics, such as courteousness, friendliness, "really cares," good personality, cooperative, and helpful.

Fewer respondents submitted comments about local veterinarians' weakest points. Of the 25% who did respond, comments varied from poor diagnosis and explains things poorly to hardly available and always in a hurry. Many sheep producers commented that the local veterinarian had no experience with sheep.

1. Wise JK. US market for food animal veterinary medical services. *J Am Vet Med Assoc* 1987;190:1530–1533.

2. Wise JK. *The US market for food animal veterinary medical services.* Schaumburg, Ill: American Veterinary Medical Association, 1987.